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Fats and Oils

OUTLOOK & SITUATION

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Summary

The 1982/83 U.S. soybean carryover is now forecast at 390 million bushels, well above last season's 266 million, but below earlier expectations. Reflecting this season's record supply, the average farm price for soybeans was $5.56 a bushel in mid-January, well below the $6.13 of a year earlier. Prices are expected to average $5.50 for the season, versus $6.04 in 1981/82.

Farm prices for soybeans will not be as competitive this spring with corn and cotton grown in compliance with the acreage reduction programs. Double-cropped soybean acreage is likely to be down also, in line with reduced winter wheat area in the South. Consequently, 1983 soybean acreage could be 1 to 3 million below last year. This would set the stage for soybean price recovery; the extent of recovery will depend on how successful the acreage reduction programs are in lowering production and raising prices of crops that compete with soybeans.

U.S. soybean production is estimated at 2.28 billion bushels for 1982/83, 14 percent more than last year's 2 billion. This output, combined with a 226-million-bushel carryin on September 1, gives a record supply of 2.54 billion bushels, which exceeds the previous record of 2.44 billion in 1979/80.

Domestic processors are expected to crush 1.12 billion bushels of soybeans during 1982/83—an increase of 85 million from last year. Furthermore, exports, forecast at 950 million bushels, could be 21 million above last year. The likely increases in exports and crush—raising use 5 percent from last season's total—nevertheless will offset only half the increase in supplies.

During September-December, domestic processors crushed 396 million bushels of soybeans, 4 percent above a year earlier. In December, the year-to-year gain was 9 percent, sparked by stronger demand for soybean meal. This season's low prices and large supplies should permit a recovery in crushing margins.

Total use of soybean meal is forecast at 26.6 million short tons, an 8-percent increase from last year. Domestic use is forecast at 18.5 million tons, and meal exports at 8.1 million. Prices for soybean meal are expected to average between $165 and $185 a ton. Last year, the season-average price was $183.

The expected increase in soybean meal use is predicated on higher livestock feeding rates, especially for hogs, where profitability has improved. Domestic meal use during October-December was 7 percent above the year-earlier quarter, supporting the contention of higher feeding rates. Government acreage reduction programs may strengthen feed grain prices relative to soybeans and soybean meal, thereby favoring heavier meal feeding. However, the latest estimates of hog numbers and farrowing intentions suggest that an upturn in the hog cycle is not likely until late 1983, moderating gains in meal use this season.

Soybean oil use is expected to rise slightly from last year to 11.9 billion pounds, from 11.6 billion. The rise will come from expanded domestic comsumption, which will increase to 9.8 billion pounds, from 9.5 billion last year. Soybean oil prices are forecast between 15 to 19 cents a pound.

The U.S. soybean export forecast is up from last season's record 929 million bushels, but low prices could keep the value below last year. The European Community (EC) is the major foreign market for U.S. soybeans, taking 45 percent of 1981/82 exports. EC price and income support policies on domestically produced cereal grains are raising the cost of grains relative to soybeans and other protein feeds, thus encouraging the feeding of meal. Also, U.S. exports to Japan may increase, but weak prices will lower the value. The recent embargo by China should have minimal impact on U.S. soybean exports. China's increased production of vegetable oils and animal fats has lowered its import needs. Chinese purchases were less than 2 percent of total U.S. soybean exports in 1981/82.

World soybean production is forecast at 97 million metric tons, 11 million above last year. The world crush is expected to advance 6 percent from last year, to 79 million tons. However, higher use will not be sufficient to offset larger production, so the world carryover will likely be up 27 percent from the previous season, with the United States accounting for 86 percent of the total increase.

This season's low soybean prices are affecting prices throughout the U.S. oilseed complex. Cottonseed supplies are sharply below 1981/82, but the average price could be 15 percent below last season. The 1983 acreage reduction/payment-in-kind program for cotton could considerably tighten cottonseed supplies in 1983/84. The season-average sunflowerseed price, estimated at $9 per cwt, is $1.80 below the 1981/82 average. The lower price is due partly to a significant increase in sunflower production this year, but more importantly to the worldwide glut in oilseed output. Sunflower acreage might be down slightly from last year.

Fats and Oils Situation

1982/83 OUTLOOK FOR U.S. SOYBEANS

Supplies Rise 100 Million Bushels Above 1979/80 Record

U.S. soybean production is estimated at 2.28 billion bushels for 1982/83, down slightly from the December forecast, but still well ahead of last year's 2 billion bushels. This output, plus a 266-million-bushel carryin, (table 1) gives a total estimated supply of 2.54 billion bushels, exceeding the previous record of 2.44 billion bushels in 1979/80. The big 1982 crop reflects an increase of 4.4 million acres over 1981, and a record yield of 32.2 bushels an acre, 2.1 above last year's average (table 6).

There are several reasons for the increase in 1982 soybean acreage. First, many farmers participating in the 10-percent acreage reduction program planted less than 90 percent of their corn acreage base. In many cases, the difference between actual corn acreage and 90 percent of the base was planted to soybeans. However, two other reasons may be more compelling. Heavy rain in the Western Corn Belt delayed corn planting in May. Thus, corn plantings were off 2 percent from 1981 and 3 percent below February intentions. Part of this acreage went to soybeans. In addition, the trend toward double-cropped soybeans and winter wheat continues in the Southeast and Delta States, with double-cropped soybean acreage in 1982 up 60 percent from 1981, to about 8 million acres.

The portion of the acreage shift attributable to wet weather could be reversed if next spring's weather is more normal. In recent years, farmers in the South have greatly increased winter wheat and soybean acreage. This trend is less likely to be reversed, although acreages of both crops could be down in 1983.

Table 1—Soybean stocks: On farm, off farm, and total in all positions

Date	On farm	Off farm	Total
	1,000 bushels		
1980			
January 1	892,934	877,896	1,770,830
April 1	602,779	580,322	1,183,101
June 1	396,650	378,152	774,802
September 1	128,888	229,880	358,768
1981			
January 1	730,157	790,300	1,520,457
April 1	533,082	496,619	1,029,701
June 1	362,266	317,156	679,422
September 1	159,029	159,276	318,305
1982			
January 1	884,184	743,188	1,631,372
April 1	581,276	459,361	1,040,637
June 1	360,237	291,921	652,158
September 1	129,602	136,571	266,173
1983			
January 1	1,074,278	752,223	1,826,501
April 1			
June 1			
September 1			

Crop Reporting Board, SRS.

Low Prices Increase Use—But Not Enough

U.S. soybean use for 1982/83 is forecast at 2.15 billion bushels, up from the 2.14 billion forecast in December and 5 percent above 1981/82 use. Domestic processors are expected to crush 1.12 billion bushels in the current marketing year, 85 million above 1981/82. Furthermore, exports are forecast at 950 million bushels, a 21-million increase from last season. If these forecasts hold, almost 85 percent of the available U.S. soybean supply will be used in 1982/83, compared with a supply-to-use ratio of 89 percent during 1981/82 and 85 percent in 1980/81 (tables 7 and 10).

Although total use is expected to increase 0.5 percent from last year, a 10-percent increase in supplies (225 million bushels more than in 1981/82) will keep downward pressure on prices. The ratio of the change in use to the change in supplies is about 0.5. This compares with a similar ratio of 0.58 in 1979/80, a year in which prices fell.

Ending stocks are forecast at 390 million bushels. This projection represents a decline of 40 million bushels from December's forecast, but it is still well above last year's carryover of 266 million bushels and 1980/81's 318 million. With stocks this high, prices will remain weak relative to recent years, averaging around $5.50 a bushel.

Soybean Crush to Rise

Domestic processors are expected to crush 1.12 billion bushels in 1982/83—up about 9 percent from year-earlier depressed levels. Large soybean supplies and an increase in meal demand are the principal factors supporting a larger crush. The gross crushing margin—the value of the oil and meal less the season-average farm price for soybeans—could be as high as 50 cents a bushel. This margin is a considerable improvement over last season's 34-cent margin. It would still be below 1979/80's high of 70 cents.

Crushings in September and October were below those of a year earlier, but November and December crushings represented a robust recovery. Crushings rose to 111.8 million bushels in December, well ahead of a year ago. According to the National Soybean Processors Association, November and December crushings represented about 90 percent of capacity utilization, up from 82 percent a year earlier.

Stronger Soybean Meal Use Forecast

Total soybean meal use is forecast at 26.6 million tons for 1982/83, a-7.8 percent increase from last year. Domestic use is forecast at 18.5 million tons, more than a 4-percent rise from a year earlier. Meal exports, at 8.05 million tons, are forecast to be 16.5 percent above a year ago (tables 8 and 11).

The expected increase in soybean meal use is predicated on higher livestock feeding rates, especially for hogs, where profitability has improved. Domestic meal use during October-December was 7 percent above the year-earlier quarter. The hog/meal price ratio is over 6.3, well above last season's average of 5.7. The hog/corn ratio is an attractive 23 to 1. Both should encourage more intensive feeding. However, the USDA Hogs and Pigs report showed the total inventory down 9 percent on December 1. The breeding hog inventory is also down. Farrowing intentions for the December-May period are 3 percent below last year and 15 percent below 2 years ago. Attractive feeding margins normally presage an upturn in livestock feeding, but high real interest rates and the poor condition of many farmers' balance sheets appear to be making producers hesitant about large financial commitments to expand their operations.

Presently, soybean meal prices are forecast to average $165 to $185 a ton. This range represents an increase from last fall's forecast, but the midpoint is still below last year's season average of $182.52 a ton.

Soybean Oil Use Up Slightly

Total use of U.S. soybean oil is forecast to be up slightly from last year, 11.88 billion pounds versus 11.61 billion. The increase will come from expanded domestic use, which could reach 9.8 billion pounds this year, against 9.5 billion in 1981/82 (tables 9 and 12). With production forecast up by more than 9 percent from last year and use up only slightly, ending stocks will increase, and prices will be lower. Prices are expected to range between 15 and 19 cents a pound, with the season-average price close to 17 cents, down from last year's 19-cent average.

Soybean Exports—Perhaps a Record

U.S. soybean exports for 1982/83 are projected at 950 million bushels, up slightly from the December forecast and a 21-million-bushel increase from 1981/82. There is a 66-percent chance that exports will be between 925 million and 975 million bushels.

The European Community (EC) continues to hold the most potential for expanded purchases of U.S. soybeans. Because of EC pricing policies for grains, the price of soymeal relative to other feeds remains highly favorable in the Community. Therefore, EC purchases of U.S. soybeans are expected to reach about the same level as last year. Last year, the strong U.S. dollar offset some of the decline in U.S. soybean prices.

Japan—the United States' second largest customer with 20 percent of sales—could increase its purchases marginally. Exports could climb even more if the yen were to rise against the dollar. However, low prices for U.S. soybeans would probably reduce the total value of those exports.

Although world trade in soybeans is expected to rise slightly, the U.S. share of the world market is forecast to drop from more than 88 percent in 1981/82 to about 84 percent in 1982/83. This is due to an estimated 47-percent increase in Argentine exports and a 25-percent rise in Brazilian exports.

1983/84 OUTLOOK FOR U.S. SOYBEANS

PIK Program Could Help Soybeans

To bring supplies of feed grains, food grains, and cotton into closer balance with demand, the USDA has announced acreage reduction programs for those crops in 1983. Farmers who participate in the acreage reduction programs may also idle an additional 10 to 30 percent of the base acreage of a particular crop in return for a payment-in-kind (PIK). Farmers can also submit bids to take the entire acreage base of any of the above crops out of production. The Commodity Credit Corporation (CCC) reserves the right to reject any or all of the whole-base bids, depending on the amount of acreage reduced under the basic program, local economic conditions, or other factors. In no event, may more than 50 percent of a specific program crop's base in a county be taken out of production.

Participation in the acreage reduction and PIK programs is expected to be heavy. Overall, 45 to 50 million acres of cropland could be taken out of production in 1983. These programs could indirectly give the soybean market a shot in the arm. In particular, smaller stocks and stronger prices for corn would help soybean prices recover from this season's low level. Of course, the extent of any recovery in soybean prices will hinge to a large degree on soybean production. At this time, most of the attention is focused on the amount of soybean acreage likely to be planted in 1983. Later on, the focus will switch to yields.

Soybeans Less Competitive With Program Crops

Soybeans will be less competitive with corn and cotton grown under the farm programs than in 1982. Soybean prices are now lower than last spring, while the target prices for corn and cotton are higher. In 1982, participants in the corn acreage reduction program planted less corn than the 90 percent of the base allowed under the program rules. In the Corn Belt, Delta, and Southeast—regions which accounted for about 95 percent of U.S. soybean acreage in 1982—participants planted 82 percent of the corn base. As a result of the underplanting of corn, 2.25 million acres of the corn base could have been planted to another crop, much of which was probably soybeans (table 2).

In 1982, the corn target price was $2.70 a bushel. Soybean prices—no. 1 yellow, Central Illinois—averaged about $6.25 a bushel during the first quarter of 1982. The resulting soybean/corn price ratio was $6.25/$2.70 or 2.3 to 1. The corn target price is $2.86 for 1983, so soybean prices would have to be around $6.60 to maintain their 1982 competitive position with corn grown in compliance with the farm program. Although soybean prices have strengthened in recent weeks, they are still nearly a dollar short of $6.60, and could average only $5.70 to $5.90 during the first quarter of 1983. Consequently, corn producers who participate in the 1983 acreage reduction/PIK program have an incentive to plant the maximum corn acreage permitted. This would mean less acreage available for soybeans.

The PIK program itself should have little effect on soybean acreage. Given the program benefits and rules, participants have a strong incentive to allocate their entire base acreage of a program crop to that crop or to conservation uses. The PIK program could, however, encourage a greater number of corn producers to participate in the acreage reduction program. Last year, nonparticipants generally planted above their corn base, so by participating this year, they would free some land for other crops such as soybeans. As table 2 shows, however, corn underplantings by participants in 1982 greatly exceeded overplantings by nonparticipants in the important soybean regions. Moreover, if the PIK program raises price expectations for corn relative to soybeans, nonparticipants could also plant more corn and reduce their soybean acreage. The soybean/corn price ratio for Central Illinois averaged more than 2.4 to 1 during the week before the PIK program announcement; by January's end, it had fallen below 2.3 to 1.

The cotton target price will be higher in 1983, 76 cents a pound versus 71 cents in 1982. Because soybean prices are lower, program participants are likely to plant closer to the maximum cotton acreage allowed. Cotton cash prices are roughly the same as last year, so the soybean/cotton price ratio has fallen quite sharply. As table 2 indicates, there is a potential loss of 300,000 to 400,000 acres of soybeans in the Delta and Southeast this year. In addition, 200,000 to 300,000 acres of cotton were replanted to soybeans last summer, after much of the Texas cotton crop was destroyed by rain and hail. This acrage may go back to cotton in 1983.

During 1982, over 8 million acres of soybeans were double cropped with winter wheat in the Delta and Southeast. In these regions, double-cropped soybean acreage amounted to 90 percent of winter wheat acreage, indicating that nearly all winter wheat acreage is double cropped. The acreage seeded to winter wheat last fall was down 0.8 million acres from a year earlier. Whether this was due to participation in the 1983 wheat acreage reduction program or to low wheat prices is not known. If the former were true, it could mean a significant decline in double-cropped soybean acreage. As of January 5, 1983, more wheat acreage in the Delta and Southeast had been signed up for advance 1983 diversion payments than was in compliance with the 1982 program. This could indicate that participation in the 1983 wheat program will be higher and that double-cropped soybean acreage will be lower. On the other hand, if wheat acreage is being reduced because of low wheat prices or other reasons, some additional acreage would be available for spring crops. Because of the double cropping, this would change the mix of single- and double-cropped soybeans more than the total soybean acreage.

On balance, U.S. soybean acreage could fall by 1 to 3 million in 1983. This could set the stage for a recovery in

Table 2—Corn, cotton, and wheat base acreage and plantings in 1982 by program participants and nonparticipants

Commodity	Region[1]	Participants			Nonparticipants		
		Base	Planted	Residual[2]	Base[3]	Planted	Residual[2]
				Million acress			
Corn	E. Corn Belt	4.75	3.78	0.55	21.59	21.82	−0.23
	W. Corn Belt	14.94	12.61	1.43	23.26	23.48	−.22
	Delta	.27	.19	.06	.2.19	2.51	−.32
	Southeast	.27	.42	.21	3.83	2.95	.88
	Total			2.25			[4]−.77
Cotton	Delta	2.39	1.84	.23	.94	.80	.14
	Southeast	.61	.47	.06	.24	.22	.02
	Total			.29			.16
Wheat	Delta	.81	.56	.16	3.71	4.85	−1.14
	Southeast	.44	.30	.09	2.26	3.49	−1.13
	Total			.25			−2.27

[1] E. Corn Belt - Illinois, Indiana, Michigan, Ohio; W. Corn Belt - Iowa, Kansas, Minnesota, Missouri, Nebraska, S. Dakota; Delta - Arkanasa, Kentucky, Louisiana, Mississippi (plus Missouri for cotton); Southeast - Alabama, Georgia, N. Carolina, S. Carolina. [2] Residual: Base less the sum of planted and conserving use acreage for participants; base less planted for nonparticipants. [3] 1983 base less 1982 base of participants. [4] Excludes Southeast.

soybean prices. The extent of the recovery depends on how much the acreage reduction/PIK programs lower burdensome stocks and raise prices of competing crops.

1982/83 WORLD OUTLOOK FOR SOYBEANS

Soybean Output To Climb

World soybean production for 1982/83 is forecast at 96.8 million metric tons, 10.6 million above last season. The rise in U.S. soybean production accounts for 71 percent of the worldwide increase, with Brazil, Argentina, and the People's Republic of China (PRC) making up a combined 23 percent. The increase in world soybean production accounts for 89 percent of the rise in global output of all oilseeds, which is forecast at 181.4 million tons, up 7 percent from last year's 169.5 million. The world soybean crush is forecast at 79 million tons in 1982/83, a 6-percent increase from 1981/82. Higher soybean use will not be sufficient to offset larger production, so the world carryover will likely be up 27 percent from last year. U.S. ending stocks will account for 85 percent of the total rise (table 14).

U.S. Trade Prospects—Purchases Up, Value Down

Total U.S. soybean exports are expected to rise by a moderate 1 to 2 percent. However, ample world supplies will keep prices about 10 percent below 1982 levels. Consequently, the value of U.S. exports is likely to fall, perhaps even below 1981's $5.98 billion.

Because of EC policies that keep grain prices higher than those for meal, soymeal prices will be below local feed grain prices in some countries in the Community. Given a continuation of these policies, strong meal demand will keep U.S. exports near last year's level. U.S. exports to Japan could increase, but weak prices will lower the value.

The recent Chinese embargo of U.S. soybeans should have little impact on U.S. trade. The value of U.S. soybean exports to China was about 1.5 percent of the total value of U.S. soybean exports in fiscal 1982. Recent increases in Chinese production of vegetable oils and animal fats had already reduced export expectations.

In non-EC Western Europe, imports could rise, with Spain's imports from the United States well ahead of a year ago. Imports of soybeans and soybean meal could expand with South America and the EC becoming the major suppliers.

OUTLOOK AND SITUATION FOR OTHER OILSEEDS AND PRODUCTS

Cottonseed Production Down

Cottonseed production in 1982/83 is estimated at 4.78 million tons, 25 percent below 1981. Although the average yield of 0.48 ton per acre was slightly above the 1981 yield, harvested cotton area was nearly 4 million acres below 1981, because of the 15-percent cotton acreage reduction program and destructive weather last summer in Texas.

Beginning stocks of cottonseed on August 1, 1982, were 0.78 million tons. So, total supplies for 1982/83 are an estimated 5.56 million tons, 1.2 million below 1981/82.

Cottonseed crushings for 1982/83 are expected to be 4.1 million tons, 0.5 million below last season. A crush of this magnitude should produce about 1.3 billion pounds of oil and 1.9 million tons of meal. Total domestic use of cottonseed, including crushings, is estimated at 5.1 million tons, and exports are likely to total 50,000 tons (tables 15 and 18).

Although cottonseed stocks are being reduced nearly 50 percent this season to around 400,000 tons, farm prices will average below 1981/82—$77 a ton, down from $86. In December, farm prices averaged $86 a ton, slightly above the year earlier.

Cottonseed oil supplies are estimated at 1.4 billion pounds this season, 14 percent below 1981/82. Nevertheless, oil prices will probably average around 17.5 cents a pound, 2.6 cents below last season. During October-December, prices averaged only 16.7 cents a pound. Abundant soybean oil supplies and weak prices are affecting the entire vegetable oil complex.

Supplies of cottonseed meal for 1982/83 are an estimated 2 million tons, 12 percent below last season. Ending stocks next October 1 could be around 60,000 tons, a 61-percent reduction. This prospect and higher soybean meal prices have helped boost cottonseed meal prices in recent months. For the season, meal prices could average around $160 a ton, $4 above the 1981/82 average (tables 16-20).

Cottonseed production is expected to be down sharply in 1983. A 20-percent acreage reduction program has been announced for upland cotton. Participants in the acreage reduction may idle an additional 10 to 30 percent of their cotton base acreage in return for a payment-in-kind equal to 80 percent of the farm's established yield. Participation in these programs is expected to be high, with planted cotton acreage dropping significantly. As a result, cottonseed stocks will tighten considerably in 1983/84. Total supplies could be 4 to 4.5 million tons, compared with 5.6 million this season and 6.8 million in 1981/82.

Sunflower Production and Supplies Up Sharply

Sunflower acreage planted in the four major producing States (North Dakota, South Dakota, Minnesota, and Texas) was up 30 percent in 1982. Because of wet fields, spring planting was 2 to 3 weeks late, and the crop developed slower than usual. Growing conditions in the summer were generally good, but it was dry in Texas. Frosts in late August and early September in some areas of the northern growing States did some damage to sunflowers still in the ray flower stage. However, harvested acreage was above last year—approximately 4.924 million in the four surveyed States. The average yield was 1,156 pounds an acre, only slightly below last year's 1,177 pounds.

Based on these figures, 1982 sunflower production was 5,866 million pounds (2.66 million metric tons), up 27 percent from last year's 4,625 million and more than 50 percent above 1980. Total supplies of U.S. sunflowerseed are forecast at about 3 million metric tons in 1982/83, up sharply from 2.4 million a year earlier, but, well below the record 3.5 million in 1979/80 (tables 21-23).

The 1982 acreage reduction programs for wheat and cotton played an important part in the 1.1-million-acre increase in sunflowers planted last spring. However, the 1983 PIK program for corn, wheat, sorghum, rice, and cotton will have no effect on sunflower acreage, because PIK land taken out of production can only be allocated to conservation use. Early indications are that sunflower acreage in 1983 will be slightly lower than in 1982.

Sunflowerseed Exports Down Slightly

U.S. sunflowerseed exports in 1981/82 were 1.555 million metric tons, up from 1.505 million in 1980/81. Even though the domestic crushing industry is growing, the bulk of U.S. sunflowerseed production has been exported. In 1981/82, exports accounted for about 75 percent of production. The largest single market for U.S. sunflowerseed was Mexico, which took about 40 percent.

Traditionally, the largest market has been the EC. However, in 1981/82, the Community took only 35 percent of U.S. sunflowerseed exports, versus 60 percent a year earlier. The reduction was due to increased EC production of rapeseed, as well as to the stronger U.S. dollar. Following Mexico, the largest individual markets were the Netherlands, with 21 percent; Portugal, 11 percent; Spain, 9 percent; West Germany, 5 percent; and Belgium-Luxembourg, 4 percent.

U. S. exports for 1982/83 are estimated at 1.5 million metric tons, slightly below last year. Larger availabilities outside the United States are dampening U.S. export prospects. However, lower prices should encourage foreign purchases. Also, with declining U.S. interest rates, the dollar may weaken, which would improve foreign demand. On the other hand, more than a 13-percent gain is expected in sunflowerseed supplies in the rest of the world, which may limit U.S. exports this year. In the first 3 months of 1982/83, exports of sunflowerseed were running about 15 percent behind year-earlier levels, which partly may be because of the late sunflower harvest.

Crushings in 1982/83 To Increase

U.S. sunflowerseed crushings—about 374,000 metric tons during 1981/82—fell dramatically from the previous year's record 780,000 tons. Both oil and meal yields averaged below the previous year. U.S. sunflower-crushing capacity expanded to over 2 million tons this past fall, when two new, large plants in North Dakota became operational. Because of the large capital investment, these plants will run as long as margins cover variable costs. Therefore, U.S. sunflowerseed crushings are expected to be larger in 1982/83, and they may reach 600,000 tons, more than a 50-percent increase from last year. A crush of this size would yield about 235,000 metric tons of sunflower oil.

Sunflower Oil Production and Exports Down in 1981/82

Production of sunflower oil in 1981/82 was about 137,000 metric tons, less than half of the year-earlier figure. Production fell because foreign buyers bid sunflowerseed prices above what domestic consumers would pay for the oil and meal. Also, with ample supplies of cheaper cottonseed oil, some of the export markets that sunflower oil had filled the previous year were regained by cottonseed oil. For long-term growth, larger domestic and foreign markets for sunflower oil need to be created by aggressive promotion and merchandising.

U.S. exports of sunflower oil during 1981/82 were 103,000 tons, compared with 301,000 a year earlier. Oil exports are expected to remain at about the same level in 1982/83. Increased sunflower oil production in other exporting countries is the principal factor limiting U.S. exports this year. Somewhat offsetting this is the lower cottonseed oil availability in the United States which will help sunflower oil find markets in a number of foreign countries that are major users of cottonseed oil. In the first 2 months of 1982/83, U.S. sunflower oil exports were running only about half of year-earlier levels. The largest export market for U.S. sunflower oil in 1981/82 was the Soviet Union, which took about 40 percent of the exports. The USSR has taken none so far this year. Other major markets in 1981/82 were: Venezuela, 30 percent; Japan, 11 percent; Algeria, 5 percent; and Egypt, 3 percent.

Sunflowerseed and Oil Prices Drop

The average farm price for sunflowerseed in 1981/82 was $10.80 per cwt, down 30 cents from the previous year. The average price received during October-January was $8.80, about $1.80 less than a year earlier. The lower price is due partly to the significant increase in sunflower production this year, but more importantly to the worldwide glut of oilseeds. The average farm price for 1982/83 is forecast at about $9 per cwt.

The price of sunflower oil (crude, Minneapolis) averaged 25.12 cents a pound in 1981/82, down almost 3 cents from the previous year. The price peaked in March, when it averaged 27.2 cents a pound, but it has gradually declined since then to about 23 cents a pound.

Higher Flaxseed Production Lowers Imports and Prices

The 1982 acreage reduction programs for wheat and feed grains, depressed Durum wheat prices, and a relatively strong farm price for flaxseed during 1981/82 motivated North Central farmers to increase planted acreage from 645,000 in 1981 to 860,000 in 1982. Furthermore, favorable weather pushed yields to a record high. Total production is forecast at 11.6 million bushels, a 49-percent rise over 1981.

The low 7.8-million-bushel crop in 1981 resulted in tight supplies and caused record flaxseed imports of 3.5 million bushels. Stocks on June 1, 1982, were at an unprecedented low of 2 million bushels, 0.8 million below carryin. The larger 1982 crop is allowing a boost in exports and a reduction in imports. Exports could reach 550,000 bushels, up from only 11,000 in 1981/82. Meanwhile, imports are expected to total 1.5 million bushels, less than half of last season's level (table 3).

The domestic crush of 11.5 million bushels expected this season will likely yield 230 million pounds of linseed oil and 215,000 tons of linseed meal. Despite an expected rise in the volume of flaxseed crushed, these production forecasts are below last season, because they are based on a return to a more normal crushing yield—about 36 percent for oil and 67 percent for meal. During the last two seasons, oil yield has exceeded 37 percent and meal yield 70 percent.

Farm prices of flaxseed are forecast at $5.40 a bushel for 1982/83, compared with $6.73 last season and $7.20 in 1980/81. Prices had fallen to $4.77 a bushel by January, $2 below the year earlier.

Table 3—Flaxseed: Supply, disappearance and price, U.S.

Year beginning June 1	Supply				Disappearance					Price
	Beginning stocks	Production	Imports	Total	Crush	Exports	Seed	Residual	Total	Average received by farmers
	1,000 bushels									*Dol./bushel*
1978	5,315	8,614	1,557	15,486	13,009	91	724	−924	12,900	5.74
1979	2,586	12,014	1,916	16,516	12,425	174	650	−1,751	11,498	5.97
1980	5,018	7,928	2,510	15,456	11,927	76	547	131	12,681	7.20
1981	2,775	7,799	3,502	14,076	11,231	11	691	115	12,048	6.73
1982[1]	2,028	11,635	1,500	15,163	11,500	550	600	—	12,650	5.40
1983[1]	2,513									

[1] Forecast.

Table 4—Peanuts (farmers' stock basis): Supply, disappearance, and price, U.S.[1]

Year beginning August 1	Supply				Disappearance					Price		
										Average received by farmers	Support	
	Beginning stocks	Production	Imports	Total	Crush	Exports	Food	Seed, feed, loss, and shrinkage	Total		Quota	Additional
	Million pounds									*Cents/lb.*		
1978	581	3,952	1	4,534	527	1,141	1,996	284	3,948	21.1	21.00	12.5
1979	586	3,968	1	4,555	571	1,057	2,028	271	3,927	20.6	21.00	15.0
1980	628	2,301	401	3,330	446	503	1,647	321	2,917	25.1	22.75	12.5
1981	413	3,982	2	4,403	574	576	1,933	558	3,647	26.9	22.75	12.5
1982[2]	756	3,441	2	4,199	473	735	2,025	266	3,499	24.9	27.50	10.0
1983[2]	700											

[1] Disappearance forecast for latest year. [2] Forecast.

Peanut Supplies Down a Little, Use Up

U.S. peanut supplies for 1982/83 (August-July) may total 4.2 billion pounds, about 5 percent below last season. Because of the reduction in acreage in 1982, production was 14 percent lower than the previous year. However, the 1982 yield of 2,703 pounds per acre is the highest on record (table 4).

Edible uses are expected to increase in 1982/83. Domestic edible use may reach the pre-1980 drought level of more than 2 billion pounds. Because of increased edible demand and the smaller crop, crushings may be down about a fifth.

Exports will likely increase further but will fall short of pre-1980 drought levels. During August-November 1982, exports were a fifth larger than the same period a year earlier. However, the strength of the dollar overseas and the economic recession continue to dampen demand for peanuts in Europe, our major market. Also, China has become a major supplier of edible peanuts, especially to Japan.

Farm prices for the 1982 crop averaged 24.9 cents a pound, down 2 cents from the previous season. However, because of stronger demand, prices of Virginia peanuts were nearly the same as a year ago. With lower production and prices, the value of the 1982 crop declined by 20 percent.

Because of increased yields, lower seed and fuel costs, and a decline in the rate of increase in most other production inputs, nonland production costs were estimated to be a little lower in 1982. The slower rate of increase in input prices is expected to continue in 1983.

The Agriculture and Food Act of 1981 provides a poundage quota of 1.167 million short tons in 1983, 2-3/4 percent below 1982. Loan rates for quota peanuts in 1982 will remain at $550 a ton. The law provides that the national average support level for the 1983, 1984, and 1985 crops of quota peanuts will be the support rate for the preceding crop, with adjustments to reflect any increase in the national average cost of production for the preceding year, but in no event less than $550 a ton. Because the cost of producing 1982 crop peanuts is estimated to be below that of 1981, this indicates that the national average support level would remain unchanged from the 1982 level of $550 a ton.

Price support rates on additional peanuts are to be set at a level the Secretary of Agriculture determines appropriate, taking into account factors such as the demand for peanut oil and peanut meal, both domestic and foreign, and expected prices for other vegetable oils and protein meals. The level must also be set to ensure no loss to CCC from sale or disposal of such peanuts placed under loan. The 1982 additional peanut support level was $200 a ton.

ANIMAL FATS OUTLOOK AND SITUATION

Lard Production Lower, Direct Use Up

Data on commercial lard production, which are published in the Statistical Reporting Service's Livestock Slaughter report, are again available on a monthly basis beginning with January 1983. This replaces the quarterly reporting begun last year during the April-June quarter.

Lard production in 1982/83 is projected at 970 million pounds, with the largest reductions in fourth-quarter 1982 and first-quarter 1983. This is down about 9 percent from last year's 1,057 million pounds. Last year's commercial production was also smaller than a year earlier, primarily because of lower hog slaughter. The yield of lard per hog was lower in 1981/82 and is expected to hold at that level through 1982/83. Because of the stabilized yield and a continued drop in hog slaughter, lard output is expected to keep falling in 1982/83.

Direct use of lard during 1981/82 was 594 million pounds, up 9 percent from last year. The increased demand for lard for direct use offset a large part of the decline in use in edible products; use was down from 480 to 361 million pounds. As a result, domestic disappearance dropped 7 percent to 955 million pounds, while production was down 9 percent. A similar consumption pattern is expected in 1982/83, and domestic disappearance could fall below 900 million pounds. Lard production is expected to continue to decline and competition from soybean oil will keep lard use in edible products down.

Lard exports in 1981/82 were 114 million pounds, compared with 144 million a year earlier—a drop of 21 percent. The higher price of lard compared with soybean oil held exports down and is continuing to do so in 1982/83. In the first 3 months of this season, lard exports were 27 million pounds, well below the 38 million of a year earlier. Exports were off sharply to both Mexico and Canada, our two largest markets.

Lard prices (loose, tanks, Chicago), which were running 21 to 23 cents a pound during most of 1981/82, dropped to about 16 cents in January 1983. Weakness in the lard export market and the continued large supply of vegetable oils selling at prices below lard have depressed lard prices. However, the expected lower hog slaughter in 1982/83 and the accompanying lower lard production, as well as the strong demand for lard for direct use, should prevent prices from going much lower and provide a sound base for a price increase in the future.

Edible Tallow Production Up Slightly

Edible tallow production during 1981/82 was 1,101 million pounds, slightly below 1980/81's 1,122 million—the first decline in a number years. However, production of edible tallow remained higher than lard output. It appears that the rapid rise in edible tallow production in recent years, due to the conversion of meat-packing plants to the boxed beef type of operation, has stopped. Therefore, this marketing change will no longer be a major factor in increasing production. In the future, production will again depend on the number of cattle slaughtered under Federal inspection and the yield of edible tallow per head. Production of edible tallow in the first 2 months of 1982/83 was the same as a year earlier. Production for the whole season is forecast at 1,130 million pounds, with beef production up slightly.

Domestic disappearance of edible tallow in 1981/82 was 996 million pounds, practically the same as the previous year. However, there was considerable change in what constituted this figure. In 1981/82, direct use of edible tallow increased to 256 million pounds, compared with 228 million the previous year. At the same time, consumption in edible products declined from 740 to 702 million pounds. This shift is continuing in 1982/83. In the first 2 months, direct use was 30 million pounds above a year earlier, while use in edible products was down 15 million.

Exports of edible tallow in 1981/82 were 94 million pounds, down from 137 million the previous year. Exports were continuing to fall in the first 3 months of 1982/83—5 million pounds versus 29 million a year earlier. The drop in exports is a result of lower priced palm and soybean oils taking over more markets.

Edible tallow prices (Chicago) continued to closely follow those of lard. In September, both were 21 cents a pound, down from 23.5 cents 3 months earlier. Edible tallow prices since then have dropped substantially and, in January, were running 16 to 17 cents—about the same as crude soybean oil. With the abundance of edible oils, it is doubtful that edible tallow prices will rise much over the next several months.

Production of Inedible Tallow and Grease Down Slightly in 1982/83

Production of inedible tallow and grease declined slightly in 1981/82, to 6,042 million pounds, and a similiar drop is forecast for 1982/83. Hog slaughter is expected to fall 9 percent, accompanied by a rise of less than 1 percent for beef and 2 percent for broilers. Therefore, production of inedible tallow and grease will likely fall to 5,950 million pounds.

Domestic use in 1981/82 was down about 5 percent to 2,894 million pounds. This decline was caused by reduced consumption in soap and fatty acids. Since use in fatty acids is closely associated with business activity, consumption in the first 2 months of 1982/83 has continued to decline. As the economy picks up, use in fatty acids should also increase.

Use in soap during the first 2 months remained at last year's level. Use in feed, which is the largest domestic use, last year increased about 6 percent. This use is continuing to expand, with consumption in the first 2 months up almost 8 percent from a year earlier. Therefore, losses in the fatty acid market as well as a drop in exports are being offset by a much larger use in feed.

Exports of inedible tallow and grease in 1981/82 were 3,079 million pounds, slightly below the previous year. Exports were up earlier in the year, but then dropped sharply in the latter part. In the first 3 months of 1982/83, exports were down 5 percent from a year earlier. Exports for all of 1982/83 are forecast at 2,975 million pounds, down over 100 million from last year.

Prices of inedible tallow (No. 1, delivered, Chicago) were running 13 to 15 cents a pound through most of 1981/82. However, they started falling in August and, in January, were down to about 11 cents. This decline was due to the great abundance of fats and oils in the world, particularly palm and soybean oils. It has also been caused by weakness in the export market and the fatty acid industry. Therefore, prices of inedible tallow and grease are expected to stay low for the next several months.

Consumption of Protein Supplement Feeds

by

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ABSTRACT: This article discusses feeding values and presents estimates on domestic consumption of protein supplement feeds for selected feeding years 1965/66 through 1980/81. Domestic use estimates by kind of livestock for major protein feed supplements are given for oilseed meals, animal proteins, grain proteins, and nonprotein nitrogen.

Keywords: Protein feed supplements, oilseed meals, animal feed proteins, grain proteins, urea, consumption, amino acids, crude and digestible protein.

Consumption of Protein Supplement Feeds

This article discusses feeding values and presents estimates on consumption of protein supplement feeds by 5-year intervals beginning with 1965/66 (see the accompanying table). A forecast of 1982/83 consumption is also included. Discussion will be limited to the major protein supplement feeds, in four broad categories: oilseed meals, animal proteins, grain proteins, and nonprotein nitrogen. Consumption will be measured in estimated tons of raw product and the equivalent tons at 44-percent crude protein. For example, a ton of 41-percent cottonseed meal has a 44-percent crude protein measure of 1,864 pounds, while a pound of urea is equivalent to 5.25 pounds of 44-percent crude protein.

Since protein feeds are among the more costly components of animal rations, it is important to provide enough protein for the animal to perform its assigned function, but avoid feeding more than is necessary. The primary function of protein feeds is to supply (1) amino acids not provided in adequate amounts by the cereal portion of nonruminant rations or (2) nitrogen precursors of microbial protein in the case of ruminants. Some animals use a large amount of protein for energy; for example, mink and fish may obtain more than half of their energy from protein.

Ingredients that contain more than 20 percent of their total weight in crude (total) protein are generally classified as protein feeds.

Oilseed Meals

Of the various oilseed proteins, the quality of soybean meal is the best in all measures of biological value (the percentage of the feed's digestible protein usable as a protein by an animal). Sunflower protein follows closely[1]. For the four major oilseeds, the protein quality measurements, ranked 1 to 10 (with 10 highest), are as follows:

Oilseed	Biological value	Net average utilization percent
Soybean	7.3	61
Sunflower	7.0	58
Cottonseed	6.7	53
Peanuts	5.5	43

Essential amino acid profiles of oilseed meals help determine biological values and net utilization. In all of the oilseed meals, the sulfur-containing amino acid, methionine, is low relative to other amino acids. This factor contributes to a general overfeeding of oilseed feed supplements. For simple-stomach animals, animal-marine byproduct feed ingredients are usually included in the feed mixture to assure adequate methionine. With increasing use of synthetic methionine, the current feeding levels of conventional protein feed supplements could be significantly reduced.

Soybean Meal

Raw, whole soybeans are seldom fed to livestock. Rather, they are processed and fed as either oilmeal or whole, heat-processed beans. In the past, oil was extracted by the solvent, hydraulic, or by expeller processes. Today, practically all soybeans are processed by solvent extracting and the meal contains 44 or 49 percent protein, depending on the amount of hull removed. Because of its well-balanced amino acid profile, the protein of soybean meal is of better quality than other protein-rich supplements of plant orgin. However, it is low in calcium, phosphorus, carotene, and vitamin D.

Consumption of soybean meal during 1980/81 was 69 percent above the 1965/66 level and constituted 88 percent of total oilseed meal consumption, compared with 77 percent during 1965/66. Consumption by poultry during this 15-year period rose 78 percent, while use by hogs increased by 34 percent. In addition, ruminant consumption increased about 33 percent, with some of this due to a drop in urea feeding. Soybean meal consumption by major kinds of livestock for selected years has shown the following patterns:

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[1] Source: Hegsted, D. M., *Improvement of Protein Nutrition*, National Research Council, National Academy of Sciences, 1974.

Livestock	1965/66	1970/71	1975/76	1980/81	1982/83
			Percent		
Dairy	11	8	11	9	10
Beef	9	13	14	10	11
Poultry	43	41	40	45	44
Hogs	32	34	31	32	31
Other	5	4	4	4	4
Total	100	100	100	100	100
			1,000 tons		
Total soybean meal[1]	10,272	13,466	15,665	17,385	18,100

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[1] Allowance for nonfeed use.

Other Oilseed Meals

Other oilseed protein feeds are largely made up of cottonseed meal, which prior to the 1950's was the major plant protein feed supplement. In 1965/66, oilseed meals other than soybean made up 23 percent of total oilseed meal consumption, with cottonseed meal at 19 percent. By 1980/81, the group's share of plant protein feed supplement consumption had declined to 12 percent, about 9 percent being cottonseed meal.

A recent development for oilseed meals is the growth in supplies of sunflower meal. Ten years ago, sunflower meal supplies were less than 100,000 tons. By 1980/81, total domestic supplies were estimated at slightly over 485,000 tons, a fourfold increase. Four years from now, supplies may exceed 1 million tons, which would make sunflower meal the third largest source of plant protein supplement feed. Future sunflower meal supplies from a prepressed solvent extraction of dehulled seeds with 36 to 38 percent protein (as opposed to 28 percent from whole seeds) will make sunflower meal competitive with 44-percent soybean meal.

Peanut meal supplies in recent years have totaled about 100,000 tons each year. A highly palatable byproduct, peanut meal carries a crude protein range of 41 to 50 percent. Because of its relatively high fat content (4-8 percent), peanut meal becomes rancid when held too long—especially in warm, moist climates. Supplies for the next few years are not expected to exceed current levels.

Linseed meal supplies for the past 5 years have averaged slightly more than 230,000 tons. Slightly more than half is exported, with domestic disappearance averaging about 103,000 tons a year. Linseed meal is the ground residue remaining after oil extraction from flaxseed. The crude protein in linseed meal averages 35 percent, and the pressed meal (without solvent) is preferred by horse owners, because it is palatable and imparts glossiness to the hair coat.

Animal Proteins

Protein supplements of animal origin are derived from meat-packing and rendering operations, poultry and poultry processing, milk and milk processing, and fish and fish processing. Before the discovery of synthetic vitamin B_{12}, it was generally considered necessary to supplement hog or poultry rations with one or more of these proteins. Now they have become less essential, although they are still included to some extent in rations for most simple stomach animals.

During 1965/66, animal protein feeds made up 16 percent of total protein feed supplements, with nearly 60 percent consumed by poultry, 25 percent by hogs, 14 percent by other livestock such as domestic pets, and the remaining 1 percent by young dairy calves. The 1980/81, the distribution showed a gain of 5 points for poultry, no change for hogs, and a 5-point decline for other livestock. Dairy calves retained their 1 percent.

Most animal-origin feed supplements exceed a crude protein level of 44 percent. On an equivalent basis of 44-percent crude protein, actual tons of animal protein feeds generally increase by approximately 32 percent. This difference will vary in relation to the annual aggregate mix of animal protein ingredients fed. For instance, blood flour often contains 82 percent crude protein, while meat meal will range from 50 to 55 percent. The crude protein content of fish meal varies from 56 to 76 percent, depending on the kind of fish. When of comparable quality, fish meal is superior to tankage or meat meal, being over 90 percent digestible. However, since fish meals are cooked, there is a danger that certain amino acids will be destroyed if proper processing techniques are not followed. When world fish meal supplies are short, a whole series of price bidding for protein feed substitutes is set in motion, as during the early 1970's when Peru's anchovy harvest declined.

Grain Protein Feeds

Distillers' Dried Grains

There are four major grain protein feed supplements. By tonnage volumes, distillers' dried grains (DDG's) have been the most significant ingredient of all grain protein feeds. Since a variety of grains are used in this process, the predominant grain is often used as the first word in the name—for example, corn distillers' dried grains. Supply estimates are somewhat difficult to make, since some current supplies come from production of fuel alcohol, as well as from distilled spirits.

Current estimates indicate an increase of slightly more than 20 percent for the 1982/83 feeding year. Before this year, annual consumption of distillers' dried grains hovered around 500,000 tons. With increasing use of ethanol fuel supplies from corn, a modest increase of 20 percent can be anticipated. Distillers' dried grains, like all grain protein supplements, have a relatively low protein value compared with other feed supplements made from plant proteins. Further, if "spent grains" from alcohol production are recycled for greater output, the residue byproduct will carry marginal feeding value.

Gluten Feed and Meal

Gluten feed and gluten meal are nutritionally different feeds but are reported as a single feed ingredient. Protein levels for gluten feed average 20 percent, while gluten meal often contains over 50 percent crude protein. Corn wet-milling yields show that 100 pounds of dry corn produces about 68 pounds of starch, 4 pounds of germ oilmeal, 19 pounds of gluten feed, and 6 pounds of 60-percent protein gluten meal. Increasing use of corn sweeteners and recent increases in ethanol fuel production are the major reasons for increased supplies of gluten feeds.

From 1973 to 1982, exports of gluten feed claimed an average of 13 pounds out of every 25 produced. During 1973 to 1982, exports have trended upward, with about 91 percent of production exported during 1980/81. Exports were primarily gluten feed shipments to Europe. Our domestic use patterns have not changed significantly, as most gluten feeds are used by feed formulators in poultry, hog, and pet food.

Brewers' Dried Grains

Brewers' dried grains are used primarily in milk cow feed to add bulk to a concentrate mix. Yet they also serve as a good protein supplement, averaging 26 percent. With high palatability and fiber, brewers' grains are relatively low in energy content, which means a high-energy ingredient such as molasses is added to the concentrate mix to offset the high content of crude fiber. In some locales, brewers' grains may constitute one-third of the total dairy feeds concentrate.

For the past 10 years consumption of brewers' grains has averaged 325,000 tons, with a year-to-year variation of 11 percent up or down. During the last 5 years consumption has trended below the 10-year average, with a 1981/82 consumption estimate of 264,000 tons.

Urea

Urea is used as a protein supplement in ruminant feed to bring crude protein up to nutritive standards. When ingested by ruminants, urea is initially broken down into ammonia and carbon dioxide in the rumin. Ruminal microorganisms degrade energy feeds, catabolize the ammonia, and form amino acids that promote microbial growth. As the rumin flora are passed into the true stomach and intestine, digestive enzymes free the amino acids from microbial protein, and the acids are then absorbed into the animal's blood supply.

Nutritionists often use the "6.25 times nitrogen content" adjustment factor for determining the protein equivalent of nonprotein nitrogen products such as urea. Attempts have been made to equate urea to oil meals by various thumb rules. One rule is that 1 pound of urea plus 6 pounds of corn equals 7 pounds of soybean meal. This is true if the microorganisms can convert nitrogen to protein. Inequalities in the mineral content of the two feeds show the need to add mineral supplements to the corn-urea feed, plus an additional 10 percent in energy feeds. Without such mineral and energy supplements, poor utilization of the urea-containing ration can be expected. Urea is best used in well-balanced, high-energy rations.

By the mid-1960's urea rations made up more than 40 percent of the total high-protein feeds consumed by ruminants (44-percent crude protein equivalents). By 1970, this ratio rose to slightly over half. Five years later, the percentage slipped to about one-third, as oil meal supplies increased and prices for energy feeds rose.

The following estimates show 45-percent nitrogen urea consumption by selected years:

	1970/71	1975/76	1980/81	1982/83
	Thousand tons			
Dairy	227	194	184	215
Beef	287	606	297	255
Other	8	6	3	6
Total	522	806	484	476

Considerable quantities of urea, at less than half the 45-percent nitrogen level, are fed in liquid feed mixes. However, currently there are no data on quantities of 45-percent urea equivalencies in liquid feed supplements.

Table 5—Consumption of high protein feeds at 44 percent crude protein equivalents, including urea, for selected feeding years

Year	Oilseed meal	Animal proteins	Grain proteins	Urea	Total
			Thousand tons		
Dairy					
1965/66	1,457	45	385	1,192	3,079
1970/71	1,313	38	280	1,019	2,650
1975/76	1,813	37	376	966	3,192
1980/81	1,940	31	178	1,129	3,278
1982/83[1]	2,162	23	353	1,092	3,630
Beef					
1965/66	1,677	—	121	1,507	3,305
1970/71	2,328	—	146	3,181	5,655
1975/76	2,704	—	168	1,560	4,432
1980/81	2,399	—	45	1,339	3,783
1982/83[1]	2,879	—	135	1,213	4,227
Poultry					
1965/66	6,156	2,255	385	—	8,796
1970/71	6,930	2,272	344	—	9,546
1975/76	7,654	2,175	381	—	10,210
1980/81	9,558	2,458	260	—	12,276
1982/83[1]	9,733	1,975	408	—	12,116
Hogs					
1965/66	4,067	960	93	—	5,120
1970/71	5,496	1,068	90	—	6,654
1975/76	5,668	913	91	—	6,672
1980/81	6,518	953	46	—	7,517
1982/83[1]	6,515	694	83	—	7,292
Other livestock					
1965/66	653	514	172	43	1,382
1970/71	654	459	137	31	1,281
1975/76	698	398	140	16	1,252
1980/81	742	334	45	—	1,121
1982/83[1]	754	209	100	—	1,063
Totals					
1965/66	14,010	3,774	1,157	2,742	21,683
1970/71	16,723	3,836	998	4,231	25,788
1975/76	18,535	3,522	1,155	2,542	25,754
1980/81	21,157	3,777	574	2,468	27,976
1982/83[1]	22,062	2,902	1,079	2,305	28,348

[1] Forecast.

Table 6—Oilseeds: Acreage and production, U.S.

Item	Unit	1978	1979	1980	1981
Soybean [1]					
Acreage:					
Planted	1,000 acres	64,708	71,632	70,037	67,810
Harvested	"	63,663	70,566	67,856	66,368
Production	Mil. bushels	1,869	2,268	1,792	2,000
Yield per acre harvested	Bushels	29.4	32.1	26.4	30.1
Cottonseed[2]					
Acreage:					
Planted	1,000 acres	13,375	13,978	14,534	14,330
Harvested	"	12,400	12,831	13,215	13,841
Production	1,000 tons	4,269	5,778	4,471	6,397
Yield per acre harvested	Pounds	689	901	677	924
Flaxseed					
Acreage:					
Planted	1,000 acres	710	922	779	645
Harvested	"	687	878	683	617
Production	Mil. bushels	8,614	12,014	7,928	7,799
Yield per acre harvested	Bushels	12.5	13.7	11.6	12.6
Peanuts[1]					
Acreage:					
Planted	1,000 acres	1,541	1,546	1,521	1,514
Harvested	"	1,509	1,520	1,399	1,489
Production	Mil. pounds	3,952	3,968	2,301	3,982
Yield per acre harvested	Pounds	2,619	2,611	1,645	2,675
Sunflowerseed[3]					
Acreage:					
Planted	1,000 acres	2,840	5,555	3,910	3,865
Harvested	"	2,798	5,410	3,683	3,811
Production	Mil. pounds	3,818	7,296	3,742	4,487
Yield per acre harvested	Pounds	1,365	1,349	1,016	1,177

[1] Soybeans and peanuts planted acreage grown alone for all purposes. [2] Cotton acreage and cottonseed production. [3] Minnesota, North Dakota, South Dakota and Texas. [4] Preliminary.

Table 7—Soybeans: Supply, disappearance, and price, U.S.

Year beginning September 1	Supply			Disappearance						Price
	Beginning stocks	Production	Total	Crush	Exports	Seed and feed	Residual[1]	Total	Ending stocks	Season average received by farmers
					Million bushels					Dol./bu.
1978	161	1,869	2,030	1,018	739	76	23	1,856	174	6.66
1979	174	2,268	2,442	1,123	875	68	17	2,083	359	6.28
1980	359	1,792	2,151	1,020	724	66	23	1,833	318	7.57
1981	318	2,000	2,318	1,030	929	70	23	2,052	266	6.04
1982[2]	266	2,277	2,543	1,115	950	70	18	2,153	390	5.48
1983[2]/	390									

[1] Mostly statistical discrepancies. [2] Forecast.

Table 8—Soybean meal: Supply, disappearance, and price, U.S.

Year beginning October 1	Supply					Disappearance					Price
		Production									
	Stocks[1]	Total[2]	for Animal feed	for Edible protein	Total	Exports	Shipments to U.S. territories	Domestic[3]	Total	Ending stocks	44 percent protein, Decatur
	1,000 short tons										Dol./ton
1978	243	24,354	23,205	368	24,597	6,610	47	17,720	24,330	267	190.06
1979	267	27,105	25,930	297	27,372	7,932	60	19,214	27,146	226	181.91
1980	226	24,312	23,232	286	24,538	6,784	—	17,591	24,375	163	218.18
1981	163	24,634	23,500	308	24,797	6,908	—	17,714	24,622	175	182.52
1982[4]	175	26,635	—	—	26,810	8,050	—	18,500	26,550	260	165.00-185.00
1983[4]	260										

[1] Stocks at processor plants. [2] Includes production of millfeed (hull meal). [3] Includes shipments to U.S. territories. [4] Forecast.

Table 9—Soybean oil: Supply, disappearance, and price, U.S.

Year beginning October 1	Supply			Disappearance					Price
	Beginning stocks	Production	Total	Exports	Shipments to U.S. territories	Domestic[1]	Total	Ending stocks	Crude, Decatur
	Million pounds	Cents/lb.							
1978	729	11,323	12,052	2,334	77	8,942	11,276	776	27.2
1979	776	12,105	12,881	2,690	51	8,981	11,671	1,210	24.3
1980	1,210	11,270	12,480	1,631	—	9,113	10,744	1,736	22.7
1981	1,736	10,979	12,715	2,077	—	9,535	11,612	1,103	19.0
1982[2]	1,103	11,990	13,093	2,075	—	9,803	11,877	1,215	15.0-19.0
1983[2]	1,215								

[1] Includes shipments to U.S. territories. [2] Forecast.

Table 10—Soybeans: Supply, disappearance, and price, by months, U.S.

Year beginning September 1	Supply	Disappearance			Price
	Beginning stocks at mills	Crush	Exports	Ending stocks at mills	Average received by farmers
	1,000 bushels				Dol./bu.
1981/82					
September	33,411	75,432	50,936	31,533	6.21
October	31,533	104,459	100,760	105,773	6.06
November	105,773	97,558	103,693	135,165	6.04
December	135,165	102,485	73,641	114,535	6.00
January	114,535	94,908	84,279	99,777	6.13
February	99,777	86,724	89,391	84,616	6.04
March	84,616	85,117	79,025	79,213	5.99
April	79,213	80,970	85,677	72,235	6.17
May	72,235	86,576	90,637	60,792	6.27
June	60,792	77,101	59,759	51,199	6.12
July	51,199	70,556	53,801	43,589	5.99
August	43,589	67,791	57,481	30,628	5.59
Total		1,029,677	929,080		[1]6.04
1982/83					
September	30,628	75,963	57,981	28,993	5.22
October	28,993	100,200	94,352	114,208	5.06
November	114,208	108,094	93,560	145,547	5.34
December[2]	145,547	111,782	90,100	125,160	5.46
January[2]	125,160				5.56
February					
March					
April					
May					
June					
July					
August					
Total					[1]5.48

[1] Weighted average. [2] Preliminary.

Table 11—Soybean meal: Supply, disappearance, and price, by months, U.S.

Year beginning October 1	Supply			Disappearance				Price
	Beginning stocks[1]	Production[2]	Total	Domestic use	Exports	Total	Ending stocks[1]	44 percent protein, Decatur
	1,000 short tons							*Dol./ton*
1981/82								
October	162.7	2,501.8	2,664.5	1,770.7	584.6	2,355.3	309.2	180.75
November	309.2	2,325.8	2,635.0	1,688.5	631.7	2,320.3	314.8	178.40
December	314.8	2,450.6	2,765.4	1,819.9	666.1	2,486.0	279.4	187.50
January	279.4	2,265.6	2,545.0	1,555.7	673.6	2,229.3	315.7	191.00
February	315.7	2,077.4	2,393.1	1,139.4	928.8	2,068.2	324.9	191.00
March	324.9	2,049.9	2,374.8	1,471.1	713.4	2,184.5	190.3	183.60
April	190.3	1,930.5	2,120.8	1,269.5	679.2	1,948.7	172.1	190.25
May	172.1	2,066.0	2,238.1	1,285.0	643.8	1,928.8	309.3	192.40
June	309.3	1,844.3	2,153.6	1,471.0	457.7	1,928.7	224.9	183.60
July	224.9	1,684.4	1,909.3	1,353.6	346.6	1,700.2	209.1	181.90
August	209.1	1,619.6	1,828.7	1,292.3	346.7	1,639.0	189.7	169.00
September	189.7	1,818.5	2,008.2	1,597.7	235.3	1,833.0	175.2	160.80
Total		24,634.4		17,714.4	6,907.5			182.52
1982/83								
October	175.2	2,385.9	2,561.1	1,770.1	448.2	2,218.3	342.8	157.00
November	342.8	2,581.4	2,924.2	1,851.5	723.1	2,574.6	349.6	173.40
December[3]	349.6	2,678.1	3,027.7	2,035.3	660.8	2,696.1	331.6	178.50
January[3]	331.6							
February								
March								
April								
May								
June								
July								
August								
September								
Total								

[1] Includes stocks of millfeed. [2] Includes production of millfeed (hull meal). [3] Preliminary.

Table 12—Soybean oil: Supply, disappearance, and price, by months, U.S.

Year beginning October 1	Supply			Disappearance				Price
	Beginning stocks	Pro-duction	Total	Domestic	Exports	Total	Ending stocks	Crude, tanks, f.o.b. Decatur
				1,000 pounds				*Cents/lb.*
1981/82								
October	1,736,118	1,125,271	2,861,389	884,033	187,165	1,071,198	1,790,191	19.7
November	1,790,191	1,017,819	2,808,010	776,935	146,632	923,567	1,884,443	19.9
December	1,884,443	1,069,609	2,954,052	746,050	184,254	930,304	2,023,748	18.9
January	2,023,748	995,627	3,019,375	815,499	43,925	859,424	2,159,951	18.4
February	2,159,951	917,682	3,077,633	760,328	176,714	937,042	2,140,591	18.2
March	2,140,591	912,109	3,052,700	784,838	126,491	911,329	2,141,371	18.5
April	2,141,371	866,814	3,008,185	748,048	148,498	896,546	2,111,639	19.7
May	2,111,639	930,241	3,041,880	920,936	103,250	1,024,186	2,017,694	20.6
June	2,017,694	828,388	2,846,082	748,626	208,039	956,665	1,889,417	19.4
July	1,889,417	765,558	2,654,975	737,365	270,232	1,007,597	1,647,378	19.0
August	1,647,378	732,001	2,379,379	744,501	237,433	981,934	1,397,445	17.9
September	1,397,445	818,306	2,215,751	869,122	244,081	1,113,203	1,102,548	17.4
Total		10,979,425		9,536,281	2,076,714			19.0
1982/83								
October	1,102,548	1,079,444	2,181,992	793,158	181,050	974,208	1,207,784	17.4
November	1,207,784	1,145,283	2,353,067	879,719	174,884	1,054,603	1,298,464	17.6
December[1]	1,298,464	1,197,904	2,496,368		141,966			16.6
January								
February								
March								
April								
May								
June								
July								
August								
September								
Total								

[1] Preliminary.

Table 13—Soybeans: Monthly value of products per bushel of soybeans processed, and spot price spread

Date	Value of products per bushel							Percent of value		Price	Spread between value of products and soybean price
	Soybean oil			Soybean meal			Total value	Soybean oil	Soybean meal	No. 1 yellow Ill. points	
	Yield	Price	Value	Yield	Price	Value					
	Pounds	*Cents*	*Dollars*	*Pounds*	*Dollars*	*Dollars*	*Dollars*	*Percent*			*Dollars*
1981/82											
September	11.34	19.4	2.20	48.27	190.00	4.59	6.79	32	68	6.44	0.35
October	10.77	19.7	2.12	47.90	180.75	4.33	6.45	33	67	6.30	.15
November	10.43	19.9	2.08	47.68	178.40	4.25	6.33	33	67	6.28	.05
December	10.44	18.9	1.97	47.82	187.50	4.48	6.45	31	69	6.23	.22
January	10.49	18.4	1.93	47.74	191.00	4.56	6.49	30	70	6.30	.19
February	10.58	18.2	1.93	47.91	191.00	4.58	6.51	30	70	6.24	.27
March	10.72	18.5	1.98	48.17	183.60	4.42	6.40	31	69	6.16	.24
April	10.71	19.7	2.11	47.69	190.25	4.54	6.65	32	68	6.42	.23
May	10.74	20.6	2.21	47.73	192.40	4.59	6.80	33	68	6.56	.24
June	10.74	19.4	2.08	47.84	183.60	4.39	6.47	32	68	6.31	.16
July	10.85	19.0	2.06	47.75	181.90	4.34	6.40	32	68	6.20	.20
August	10.80	17.9	1.93	47.78	169.00	4.04	5.97	32	68	5.73	.24
1982/83											
September	10.77	17.4	1.87	47.88	160.80	3.85	5.72	33	67	5.40	.32
October	10.77	17.4	1.87	47.62	157.00	3.74	5.61	33	67	5.26	.35
November	10.60	17.6	1.87	47.76	173.40	4.14	6.01	31	69	5.70	.31
December[1]	10.72	16.6	1.78	47.92	178.50	4.28	6.06	29	71	5.73	.33
January											
February											
March											
April											
May											
June											
July											
August											

[1] Preliminary.

Table 14—Supply and use: Soybeans, soybean meal, and soybean oil; U.S., major foreign exporters, other foreign and world

Item and year	United States	World less United States			World[3]
		Major exporters[2]	Other	Total	
			Million metric tons		
1981/82					
Soybeans					
Supply					
Beginning stocks	8.65	4.95	1.86	6.81	15.46
Production	54.44	16.80	14.99	31.79	86.22
Imports	—	1.24	28.02	29.26	29.26
Use					
Domestic:					
Crush	28.03	13.84	32.36	46.20	74.23
Total	30.51	14.96	41.98	56.93	87.44
Exports	25.28	2.60	1.16	3.76	29.05
Ending stocks	7.29	5.43	1.73	7.16	14.45
Soybean meal					
Supply					
Beginning stocks	.15	1.11	1.17	2.28	2.43
Production	22.36	10.72	25.89	36.62	58.98
Imports	—	—	19.99	19.99	19.99
Use					
Total domestic	16.09	1.91	40.70	42.60	58.69
Exports	6.27	9.27	5.26	14.53	20.80
Ending stocks	.16	.65	1.10	1.75	1.91
Soybean oil					
Supply					
Beginning stocks	.79	.30	.64	.93	1.72
Production	4.98	2.56	5.45	8.01	12.99
Imports	—	—	3.36	3.36	3.36
Use					
Total domestic	4.33	1.51	7.17	8.68	13.00
Exports	.94	1.01	1.58	2.59	3.54
Ending stocks	.50	.33	.70	1.03	1.53
1982/83[4]					
Soybeans					
Supply					
Beginning stocks	7.29	5.43	1.73	7.16	14.45
Production	61.97	18.64	16.22	34.86	96.82
Imports	—	1.20	29.28	30.48	30.48
Use					
Domestic:					
Crush	30.34	14.52	34.13	48.66	79.00
Total	32.79	15.62	44.20	59.82	92.61
Exports	25.85	3.69	1.28	4.97	30.83
Ending stocks	10.61	5.95	1.75	7.70	18.32
Soybean meal					
Supply					
Beginning stocks	.16	.65	1.10	1.75	1.91
Production	24.16	11.19	27.28	38.47	62.64
Imports	—	—	23.15	23.15	23.15
Use					
Total domestic	16.79	1.98	44.46	46.44	63.22
Exports	7.30	9.34	6.00	15.34	22.64
Ending stocks	.24	.52	1.07	1.59	1.83
Soybean oil					
Supply					
Beginning stocks	.50	.33	.70	1.03	1.53
Production	5.44	2.66	5.74	8.40	13.84
Imports	—	—	3.62	3.62	3.62
Use					
Total domestic	4.45	1.69	7.62	9.31	13.76
Exports	.94	.99	1.70	2.69	3.63
Ending stocks	.55	.31	.75	1.05	1.60

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[1] Data based on local marketing years except for Argentina and Brazil which are adjusted to an October-September year. [2] Major exporters include Brazil and Argentina. [3] World imports and exports will not balance due to differences in local marketing years and to time lags between reported exports and imports. Therefore, world supply may not equal world use. [4] January projections.

Table 15—Cottonseed: Supply, disappearance, and price, U.S.

Year beginning August 1	Supply			Disappearance					Price
	Beginning stocks	Production	Total	Crush	Exports	Other	Total	Ending stocks	Average received by farmers
	1,000 short tons								*Dol./ton*
1978	817	4,269	5,086	4,127	16	423	4,566	520	114.00
1979	520	5,778	6,298	4,230	94	916	5,240	1,058	121.00
1980	1,058	4,471	5,529	4,076	133	922	5,131	398	129.00
1981	398	6,397	6,795	4,575	45	1,394	6,014	781	86.00
1982[1]	781	4,777	5,558	4,100	50	1,008	5,158	400	76.50
1983[1]	400								

[1] Forecast.

Table 16—Cottonseed meal: Supply, disappearance, and price, U.S.

Year beginning October 1	Supply				Disappearance				Price
	Beginning stocks	Production	Imports	Total	Domestic	Exports	Total	Ending stocks	Average Memphis (solvent)
	1,000 short tons								*Dol./ton*
1978	69	1,885	9	1,963	1,762	150	1,912	51	164.80
1979	51	2,048	7	2,107	1,879	175	2,054	53	164.13
1980	53	1,790	—	1,843	1,636	199	1,735	108	197.06
1981	108	2,210	—	2,318	2,057	107	2,164	154	156.15
1982[1]	154	1,885	—	2,039	1,854	125	1,979	60	160.00
1983[1]	60								

[1] Forecast.

Table 17—Cottonseed oil: Supply, disappearance, and price, U.S.

Year beginning October 1	Supply			Disappearance				Price
	Beginning stocks	Production	Total	Domestic	Exports	Total	Ending stocks	Average, Valley points
	Million pounds							*Cents/lb.*
1978	85	1,282	1,367	620	661	1,281	86	31.6
1979	86	1,423	1,509	659	728	1,387	122	25.3
1980	122	1,195	1,317	527	710	1,237	80	25.9
1981	80	1,565	1,645	694	847	1,541	104	20.1
1982[1]	104	1,310	1,414	624	710	1,334	80	17.5
1983[1]	80							

[1] Forecast.

Table 18—Cottonseed: Supply, disappearance, and price, by months, U.S.

Year beginning August 1	Supply	Disappearance			Price
	Beginning stocks	Crush	Exports	Ending stocks	Average received by farmers
	1,000 short tons				*Dol./ton*
1981/82					
August	397.5	191.6	.4	352.5	100.00
September	352.5	186.2	.8	482.8	95.00
October	482.8	323.5	2.3	1,257.5	86.00
November	1,257.5	455.5	5.8	2,258.9	84.00
December	2,258.9	473.3	4.6	3,002.0	85.00
January	3,002.0	478.8	6.2	2,897.4	82.00
February	2,897.4	446.6	4.8	2,569.1	83.00
March	2,569.1	482.3	0	2,165.0	—
April	2,165.0	424.1	7.5	1,779.2	—
May	1,779.2	426.7	2.9	1,449.8	—
June	1,449.8	357.1	2.2	1,086.7	—
July	1,086.7	329.6	3.4	781.4	—
Total		4,575.3	40.9		[1]86.00
1982/83					
August	781.4	290.3	2.9	632.4	81.00
September	632.4	285.8	2.7	607.5	72.00
October	607.5	391.5	2.3	1,321.0	67.00
November	1,321.0	481.7	.1	1,830.5	81.00
December[2]	1,830.6	423.0	2.5	1,933.5	86.00
January[2]	1,933.5				
February					
March					
April					
May					
June					
July					
Total					[1]76.50

[1] Weighted average. [2] Preliminary.

Table 19—Cottonseed meal: Supply, disappearance, and price, by months, U.S.

Year beginning October 1	Supply				Disappearance				Price
	Beginning stocks	Pro-duction	Imports	Total	Domestic	Exports	Total	Ending stocks	Bulk, Memphis (Expeller)
				1,000 short tons					Dol./ton
1981/82									
October	107.7	152.1	—	259.8	169.7	12.2	181.9	77.9	150.00
November	77.9	220.2	—	298.1	199.9	17.3	217.2	80.9	150.60
December	80.9	219.0	.2	300.1	222.7	12.5	235.2	64.5	179.00
January	64.5	226.9	—	291.4	211.7	26.6	238.3	53.1	184.70
February	53.1	206.5	—	259.6	171.4	6.9	178.3	81.3	159.40
March	81.3	220.3	—	301.6	181.8	7.9	189.7	111.9	142.50
April	111.9	195.3	—	307.2	155.4	.4	155.8	151.4	150.60
May	151.4	195.9	—	347.3	152.9	5.2	158.1	189.2	154.90
June	189.2	164.4	—	353.6	139.7	4.6	144.3	209.3	160.50
July	209.3	150.2	—	359.5	126.8	13.3	140.1	219.4	163.10
August	219.4	129.8	—	349.2	163.5	.2	163.7	185.5	161.70
September	185.5	129.3	—	314.8	161.1	.1	161.2	153.6	159.20
Total		2,209.9	.2		2,056.8	107.2			159.68
1982/83									
October	153.6	173.5	—	327.1	174.5	.1	174.6	152.5	151.25
November	152.5	219.4	—	371.9	203.1	0	203.1	168.8	168.00
December[1]	168.8	198.3	—	367.1	224.0	.2	224.2	142.9	181.25
January[1]	142.9								
February									
March									
April									
May									
June									
July									
August									
September									
Total									

[1] Preliminary.

Table 20—Cottonseed oil: Supply, disappearance, and price, by months, U.S.

Year beginning October 1	Supply			Disappearance				Price
	Beginning stocks	Production, crude	Total	Domestic	Exports	Total	Ending stock	Crude, Valley points
				1,000 pounds				*Cents/lb.*
1981/82								
October	79,994	111,158	191,152	46,444	42,160	88,604	102,548	20.5
November	102,548	153,470	256,018	91,354	37,433	128,787	127,231	20.4
December	127,231	161,836	289,067	75,460	80,455	155,915	133,152	19.8
January	133,152	154,135	287,287	80,459	41,171	121,630	165,657	19.9
February	165,657	145,632	311,289	16,842	146,199	163,041	148,248	19.5
March	148,248	155,853	304,101	41,494	110,619	152,113	151,988	19.1
April	151,988	138,360	290,348	61,652	68,585	130,237	160,111	20.4
May	160,111	140,092	300,203	77,913	74,509	152,422	147,781	21.0
June	147,781	117,513	265,294	53,777	66,999	120,776	144,518	21.1
July	144,518	105,942	250,460	32,733	63,653	96,386	154,074	20.9
August	154,074	91,975	246,049	83,582	47,292	130,874	115,175	20.3
September	115,175	88,839	204,014	31,979	68,429	100,408	103,606	18.0
Total		1,564,805		693,689	847,504			20.1
1982/83								
October	103,606	129,811	233,417	60,105	52,174	112,279	121,138	16.9
November	121,138	157,303	278,441	69,662	59,980	129,642	148,799	16.8
December[1]	148,799	143,661	292,460		54,722			16.3
January								
February								
March								
April								
May								
June								
July								
August								
September								
Total								

[1] Preliminary.

Table 21—Sunflowerseed: Supply, disappearance, and price, U.S.

Year beginning September 1	Supply				Disappearance					Price
	Beginning stocks	Production	Imports	Total	Crush	Nonoil usage + seed	Exports	Total	Ending stocks	Average received by farmers
					1,000 metric tons					*Dol./mt.*
1978	77	1,823	7	1,907	292	159	1,366	1,817	90	236
1979	90	3,409	10	3,509	547	162	1,820	2,529	980	200
1980	980	1,750	28	2,758	780	167	1,505	2,452	304	245
1981	304	2,098	32	2,434	374	180	1,555	2,109	325	238
1982[1]	325	2,661	24	3,010	600	195	1,500	2,295	715	191
1983[1]	715									

[1] Forecast.

Table 22—Sunflowerseed meal: Supply, disappearance, and price, U.S.

Year beginning October 1	Supply			Disappearance				Price
	Beginning stocks	Production	Total	Domestic	Exports	Total	Ending stocks	Average 28% protein
				1,000 metric tons				*Dol./mt.*
1978	4	180	184	180	—	180	4	102
1979	4	359	363	359	—	359	4	106
1980	4	439	443	440	—	440	3	122
1981	3	201	204	200	—	200	4	117
1982[1]	4	345	349	345	—	345	4	95
1983[1]	4							

[1] Forecast.

Table 23—Sunflowerseed oil: Supply disappearance, and price, U.S.

Year beginning October 1	Supply			Disappearance				Price
	Beginning stocks	Production	Total	Domestic	Exports	Total	Ending stocks	Average crude Minneapolis
	1,000 metric tons							Dol./mt.
1978	3	115	118	70	41	111	7	728
1979	7	224	231	72	86	158	73	573
1980	73	298	371	29	301	330	41	594
1981	41	137	178	63	103	166	12	549
1982[1]	12	235	247	102	100	202	45	485
1983[1]	45							

[1] Forecast.

Table 24—Edible fats and oils: Supply and disappearance

Item	1977	1978	1979	1980	1981	1982[1]
	Million pounds					
Stocks October 1						
Coconut	137	145	157	152	204	160
Corn	46	73	70	66	76	54
Cottonseed	86	85	86	122	80	104
Lard	32	35	44	44	36	24
Palm	131	74	74	42	58	47
Peanut	171	33	47	37	16	35
Soybean	771	729	776	1,210	1,736	1,103
Sunflower	(2)	[3]7	[3]15	[3]161	[3]90	[3]26
Tallow, edible	33	42	49	46	36	47
Imports						
Coconut	980	967	810	1,122	960	677
Palm	361	277	212	324	218	275
Production						
Corn	695	737	791	864	872	865
Cottonseed	1,453	1,282	1,423	1,194	1,565	1,310
Lard	996	1,072	1,220	1,159	1,057	970
Peanut	144	155	186	139	175	147
Soybean	10,288	11,323	12,105	11,270	10,979	11,990
Sunflower	190	254	494	657	302	518
Tallow, edible	795	921	982	1,122	1,101	1,130
Exports						
Coconut	33	8	30	38	28	19
Corn	88	121	141	181	206	272
Cottonseed	758	661	728	710	848	710
Lard	132	97	94	144	114	85
Palm	51	12	21	9	10	21
Peanut	100	29	20	48	41	40
Soybean	2,057	2,334	2,690	1,631	2,077	2,075
Sunflower	75	91	190	664	227	220
Tallow, edible	18	51	70	137	94	87
Domestic disappearance						
Coconut	939	947	785	1,032	976	652
Corn	580	619	654	673	688	607
Cottonseed	696	620	660	527	694	624
Lard	861	966	1,126	1,023	955	888
Palm	367	265	223	299	218	218
Peanut	182	112	185	112	115	112
Soybean	8,273	8,942	8,981	9,114	9,535	9,803
Sunflower	108	[3]156	[3]159	[3]64	[3]139	[3]225
Tallow, edible	768	862	915	995	996	1,045

[1] Preliminary and estimated. [2] Not available. [3] World Board estimate.

Compiled from reports of the Bureau of the Census.

Table 25—Fats and oils used in edible products, by uses

Year beginning October 1	1980/81	1981/82 July	Aug.	Sept.	1982/83 Oct.	Nov.[1]	Cumulative Oct. 1982-Nov. 1982
	Mil. lb.	*Thousand pounds*					
Coconut oil:							
Baking or frying fats	123	12,390	13,270	11,211	12,982	12,138	25,120
Margarine	D	D	D	D	D	D	D
Salad or cooking oil	D	D	D	D	D	D	D
Other edible	159	8,425	10,175	8,906	9,380	10,668	20,048
Total edible	338	26,152	28,752	26,590	27,238	26,601	53,839
Corn oil:							
Baking or frying fats	D	D	D	D	D	D	D
Margarine	217	13,725	15,904	20,634	16,545	18,509	35,054
Salad or cooking oil	383	30,435	31,847	28,461	32,477	30,247	62,724
Other edible	D	D	D	D	D	D	D
Total edible	625	45,364	48,807	50,937	50,451	50,012	100,463
Cottonseed oil:							
Baking or frying fats	132	10,965	14,205	15,499	9,592	11,583	21,175
Margarine	26	1,718	1,673	1,754	2,050	2,396	4,446
Salad or cooking oil	382	28,787	37,143	32,152	33,938	39,723	73,661
Other edible	14	427	706	717	1,270	2,179	3,446
Total edible	555	41,897	53,727	50,122	46,850	55,881	102,731
Lard:							
Baking or frying fats	328	19,816	18,847	18,160	16,136	18,041	34,177
Margarine[2]	95	1,384	1,271	1,625	1,310	1,579	2,889
Salad or cooking oil	—	—	—	—	—	—	—
Other edible	D	D	D	D	D	D	D
Total edible	415	20,641	19,494	18,915	16,824	19,091	35,915
Direct use	544	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Palm oil:							
Baking or frying fats	215	11,198	17,453	18,864	19,796	16,293	36,089
Margarine	5	D	D	D	D	D	D
Salad or cooking oil	50	D	3,494	D	D	D	D
Other edible	21	D	D	D	1,889	D	1,889
Total edible	291	15,769	22,348	23,451	24,267	21,695	45,962
Peanut oil:							
Baking or frying fats	D	D	D	D	D	D	D
Margarine	—	—	—	—	—	—	—
Salad or cooking oil	105	10,598	13,242	12,805	11,909	12,542	24,451
Other edible	D	D	D	D	D	D	D
Total edible	119	11,449	14,509	13,722	12,863	13,425	26,288
Soybean oil							
Baking or frying fats	2,675	235,781	266,018	251,014	258,218	253,952	512,170
Margarine	1,666	123,304	130,290	150,284	148,741	159,764	308,505
Salad or cooking oil	4,226	392,944	393,660	397,472	371,801	328,169	699,970
Other edible	43	3,084	4,684	3,983	4,778	5,040	9,818
Total edible	8,610	755,113	794,652	802,753	783,538	746,925	1,530,463
Sunflower:							
Baking or frying fats	D	D	D	D	D	D	D
Margarine	D	D	D	D	D	D	D
Salad or cooking oil	69	D	D	D	D	D	D
Other edible	—	—	—	—	—	—	—
Total edible	79	7,727	9,721	7,332	8,299	4,634	12,933
Tallow, edible:							
Baking or frying fats	730	57,507	51,791	56,017	49,947	54,112	104,059
Margarine	—	—	—	—	—	—	—
Salad or cooking oil	—	—	—	—	—	—	—
Other edible	D	D	D	D	D	D	D
Total edible	740	58,150	52,479	56,988	50,694	54,768	105,462
Total fats and oils used in edible products:							
Baking or frying fats	4,224	348,721	383,257	373,786	368,721	368,052	736,773
Margarine	2,022	140,640	149,855	174,836	169,450	183,061	352,511
Salad or cooking oil	5,280	478,564	494,399	487,555	465,427	422,478	887,905
Other edible	381	22,679	28,059	30,552	30,518	34,758	65,276
Total edible	11,908	990,604	1,055,570	1,066,729	1,034,116	1,008,349	2,042,465

[1] Preliminary. [2] Includes lard and edible tallow.

D = Withheld to avoid disclosing figures for individual companies. N.A. = Not available.

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Table 26—Prices: Farm, wholesale, and index numbers of wholesale prices

Item	Unit	1982				
		Sept.	Oct.	Nov.	Dec.	Jan.
OILSEEDS:						
Received by farmers, U.S.						
Cottonseed	Dol./ton	72.0	67.0	81.0	86.0	87.0
Flaxseed	Dol./bu.	5.4	5.1	5.0	4.7	4.8
Peanuts	¢/lb.	24.9	25.2	25.2	25.5	24.2
Soybeans	Dol./bu.	5.2	5.1	5.3	5.5	5.6
Sunflowerseed	Dol./cwt.	10.4	8.8	8.8	8.9	8.8
FATS and OILS:						
Wholesale						
Butter, creamery, grade A, (92 & 93 score), bulk, N.Y.	¢/lb.	178.8	178.8	177.8		
Castor oil, No. 1, Brazilian tanks, imported, N.Y.	"	45.5	45.5	45.5	45.5	
Coconut oil, crude, tank cars, Pacific Coast	"	19.8	20.0	N.A.	N.A.	
Corn oil, crude, tank cars, f.o.b., Decatur	"	21.0	23.0	23.8		
Cottonseed oil, crude, tank cars, f.o.b., Valley Points	"	18.0	16.9	16.8	16.3	
Grease, white, tank cars, delivered, Chicago	"	15.3	15.0	14.5		
Linseed oil, raw, tank cars, Minneapolis	"	26.0	24.6	25.0	25.2	
Margarine, yellow, quarters, f.o.b., Chicago	"	38.0	38.0	38.0		
Palm kernel oil, c.i.f., bulk, U.S. ports	"	18.0	19.5	19.5	19.5	
Palm oil, c.i.f., bulk, U.S. ports	"	19.3	18.0	19.0	20.0	
Peanut oil, crude, tank cars f.o.b., Southeast mills	"	22.5	22.9	25.2	26.1	
Rapeseed oil, refined, denatured, tanks, N.Y.	"	55.7	55.3	55.3	55.3	
Safflower oil, tanks, N.Y.	"	72.5	72.5	72.5	72.5	
Soybean oil, crude, tank cars, f.o.b., Decatur	"	17.4	17.4	17.6	16.6	
Sunflower oil, crude Minneapolis	"	23.5	25.0	25.0	25.0	
Tallow, inedible, number 1, delivered, Chicago	"	11.4	11.0	11.0	10.8	
Tung oil, imported, drums, f.o.b., N.Y.	"	60.6	60.5	60.5	60.5	
OILMEALS:						
Cottonseed meal, 41 percent protein, solvent, Memphis	Dol./ton	150.0	145.6	161.7	166.3	
Linseed meal, 34 percent protein, Minneapolis	"	140.3	135.8	136.2	135.0	
Peanut meal, 50 percent protein, f.o.b., Southeastern mills	"	177.4	181.9	187.8	191.6	
Soybean meal, 44 percent protein, Decatur	"	160.8	157.0	173.4	178.5	
Soybean meal, 49-50 percent protein, Decatur	"	173.2	168.5	185.2	190.0	
Sunflower meal, 28 percent protein	"	102.8	100.6	97.0	91.7	
INDEX NUMBERS:						
All fats and oils	1967=100	270.6	272.0	260.8		
All fats and oils, except butter	"	299.0	300.8	286.6		
Group by origin:						
Animal fats	"	253.4	251.8	242.7		
Vegetable oils, domestic	"	123.9	136.4	124.2		
Vegetable oils, foreign	"	185.9	189.1	183.2		
Group by use:						
Butter	"	222.7	222.7	222.0		
Lard, refined	"	307.9	307.9	307.9		
Food fats other than butter	"	201.1	210.8	199.2		
Food fats other than butter and lard	"	126.6	138.5	123.1		
All edible fats and oils	"	201.3	204.4	194.7		
Soap fats	"	271.7	258.7	255.7		
Drying oils	"	169.0	165.9	165.1		
Other industrial:						
All industrial	"	254.6	243.5	240.8		
Crude	"	149.4	162.1	150.6		
Edible vegetable oils, grouped by degree of processing:						
Margarine	"	232.3	232.8	234.9		
Shortening, 440-pound drum	"	202.4	199.7	201.0		

Compiled from Chemical Market Reporter, Wall Street Journal, Feedstuffs, Reports of the Crop Reporting Board, Agricultural Marketing Service, and Bureau of Labor Statistics. N.A. = not available.

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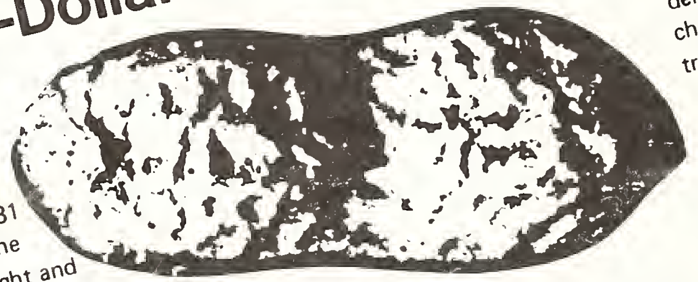

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